

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph starting on page 17, line 1 with the following paragraph:

Referring to FIG. 13, the encoder 104 was defined as RS(255,243) in the example embodiment for the channel encoding system 100 shown in FIG. 1. The bit error rate of the turbo encoder 110 was set according to a performance of the encoder 104 to achieve a desired signal-to-noise (SNR) ratio at 21.5 mega-samples per second (MSps). Here, the SNR is defined as a ratio of an energy per bit (Eb) to a noise at the demodulator (No). The 21.5 MSPS provides approximately 41 megabits per second (Mbps) at rate 2/3 (curve 1300 in FIG. 13) to accommodate two HDTV programs. Simulation results indicate that the turbo decoder 110 requires a BER of approximately 3×10^{-5} (line 1302) to achieve the desired SNR. Rate 5/6 (curve 1304) and rate 8/9 (curve 1306) are provided in FIG. 13 for comparison.